

Environmental Science Lab - EVS3000L

Spring 2021

Number of credits: 1

Meeting location and format: Asynchronous online course

Course description: Hands-on experience and exposure to data collection and analysis for environmental science, and the many varied professional trajectories in environmental science.

Prerequisites: [CHM 2045](#) or [CHM 2047](#) or [CHM 2095](#)

Syllabus

Instructors

Sarah Steele Cabrera (She/her)	Jesse Borden (He/Him)
PhD student, SNRE	PhD candidate, SNRE
ssteelecabrera@floridamuseum.ufl.edu	jborden@ufl.edu
Office Hours: Thursdays 12-1pm or by appointment	Office Hours: Wednesdays 2-3pm or by appointment
Zoom meeting ID: 969 9014 9542	Zoom meeting ID: 967 9325 4416
Zoom meeting link: https://ufl.zoom.us/j/96990149542?pwd=MXEzQjB1NHJkaWJuZHlyMmM1Ynp3UT09	Zoom meeting Link: https://ufl.zoom.us/j/96793254416?pwd=MWdNbUY5ejA0OHJKNnliaE9vWDk3Zz09
Password: EVS3000L	Passcode: EVS3000L

Class Meeting Schedule

This semester's Environmental Science lab is an asynchronous online class. This means you can work through the material each week on your own schedule. We recommend finding a consistent time to work through each week's materials assignments, and treating it like a regularly scheduled course commitment.

Location

Lessons will take place through Canvas and other virtual formats. We will also ask you to make visits to natural areas local to you. This can be your backyard, a park, or anywhere you can make observations of nature safely. If you have difficulties or concerns finding a safe and accessible area for this, please get in touch with us!

Course materials

There are no required textbooks. Readings will be made available via Canvas.

Course Objectives

Environmental science is an interdisciplinary field of study that combines physical, biological, and information science to understand the interactions and effects of natural and anthropogenic processes on the environment. Because of the diversity and interconnectedness of all aspects of human-environment relationships, environmental science careers are equally varied.

Environmental scientists work on problems spanning biogeochemical cycles, energy systems, pollution control and mitigation, natural resource management, and much more!

Our objective in this lab is to give you exposure to the diversity in environmental careers, an introduction to some methods and approaches in environmental studies research, and professional development opportunities to help you progress in the field. Lab activities will break roughly into three categories:

- Career exploration activities, where we will either hear from an environmental science professional about their career trajectory, or you will be asked to research an aspect of environmental science careers that interests you.
- Research approaches exercises, where we will introduce you to common methods for studying environmental problems from different perspectives, including policy, human dimensions, and biology. This will include hands-on sampling projects as well as how to do basic statistical analysis.
- Professional development activities, where we will focus on key practical skills for professional behavior, finding career opportunities that interest you, and preparing compelling application materials.

These activities correspond to the three primary learning outcomes for the course. At the conclusion of this course, students will:

- Have gained a basic understanding of the many possible professional trajectories in Environmental science and be able to research environmental career opportunities and evaluate how they fit with students' current skills and long-term training and career objectives.

- Plan and execute basic research projects to address questions in the natural and social dimensions of environmental science.
- Generate professional communications and application materials for career opportunities.

Communication

All course communication outside of class will be done through Canvas and your UF email. You are responsible for checking both regularly to keep up to date.

We will be online in Zoom during scheduled office hours. This is a good time to reach out to us if you have questions or want to dig more into the week's activities!

If you cannot be online during office hours, or you have questions at other times, we will try to respond to email and chat messages quickly. Please allow at least 24 hours to hear back from us if you message us outside of office hours - this means you may want to work on your assignments early, so you have time to reach out to us if you run into any sticking points.

We are also happy to meet via Zoom if you would like to schedule a time for a more substantive conversation.

Zoom policy

Our sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during a Zoom session and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during a Zoom session, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Weekly Schedule (subject to change):

Week	Topic	Assignment
Week 1 (Jan. 11)	Welcome and introductions	Discussion board introductions
Week 2 (Jan. 18)	Intro to field work	Natural history observation
Week 3 (Jan. 25)	Natural science data collection	Biodiversity survey 1 and observation
Week 4 (Feb. 1)	Human-altered landscapes data collection	Biodiversity survey 2 and observation
Week 5 (Feb. 8)	Spatial approaches	R exercise
Week 6 (Feb. 15)	Temporal and long term (NEON data)	Long term data exercise
Week 7 (Feb. 22)	Human dimensions of ENV Science: Social science research, techniques and human behavior	Reading and reflection on human dimension techniques
Week 8 (Mar. 1)	Environmental justice	Environmental justice reflection
Week 9 (Mar. 8)	Intro to environmental planning	Research companies and jobs associated with environmental planning
Week 10 (Mar. 15)	Environmental planning applications with ANAMAR environ consulting INC	Environmental Impact Statements and Assessments

Week 11 (Mar. 22)	Land management for conservation	Land conservation exercise
Week 12 (Mar. 29)	Climate change adaptation/planning in environmental science	Climate change planning exercise
Week 13 (Apr. 5)	Environmental law	Environmental policy/law proposal
Week 14 (Apr. 12)	Environmental education	Year end reflection/final assignment
Week 15 (Apr. 19)	Wrap up	Continue on year end reflection/final assignment

Course Grading

Component	Percent
Weekly assignments	70%
Final project	20%
Participation and professionalism	10%
Total	100%

Grading Scale

A	93.0-100%	A-	90.0-92.9%	B+	87.0-89.9%
B	83.0-86.9%	B-	80.0-82.9%	C+	77.0-79.9%
C	73.0-76.9%	C-	70.0-72.9%	D+	67.0-69.9%
D	63.0-67.9%	D-	60.0-62.9%	F	<60.0%

Weekly assignments

Weekly assignments will be due each week at 11:59pm EST on Sunday. We encourage you to work on them early, so you can reach out to us or your classmates if you have questions!

For several assignments, we will ask you to visit a natural area to make natural history observations and collect data about the organisms living there. We have designed these exercises on the assumption that you will be able to sit in an outdoor area for up to an hour and walk approximately 100m. If this will be difficult or impossible for you, please contact us. We are happy to make adjustments as needed.

Safety is the first priority when doing any kind of field work. Please wear appropriate clothes (we suggest long pants, closed toed shoes, a mask, and sunscreen), make sure you have water, a cell phone, and anything else you need with you, and make your visits to places and at times when you feel safe. Depending on current conditions regarding COVID-19, we may make additional scheduling arrangements to avoid high-traffic times and places. If you have any concerns or questions about field assignments, don't hesitate to get in touch with us!

Final project

The final project will be due April 23, 2021 at 11:59pm EST. For your final project, you will write up a short report synthesizing the policy, social, and biological dimensions of an environmental situation of interest to you. We will provide more details by mid-term.

Participation and professionalism

This course does not have a set meeting time each week, but it is still important that you keep up with the assignments and material. We suggest setting aside a time each week for reading, watching videos, and working on assignments for this course, and sticking to it as if it were a more traditionally-scheduled obligation. Because emerging studies indicate that cellphones and social media are a real and major distraction to online learning, students are also asked to give their undivided attention to the lessons we create.

We expect you to interact in a polite and professional manner with us, your fellow students, and the environmental professionals we interact with.

Late policy

Everyone will get one no-questions-asked one-week extension on a weekly assignment. To use this, send us a message letting us know that you will not be able to complete the assignment on time. This does not apply to the final project.

After that, late assignments will be marked down by 10% and an additional 10% each week they are late after that.

If circumstances change such that you have trouble completing either the final project or multiple weekly assignments on time, we encourage you to get in touch with us (and see below).

Course Adjustments

We are all continuing to work with unprecedented situations in all aspects of life this semester, and we expect we will need to adapt as conditions change. For our part, we will keep you informed as we make decisions about the course. Any changes to the schedule or assignments will be announced via Canvas and updated on the Canvas calendar. If you encounter new circumstances or challenges this semester that affect your ability to do the assignments as designed, please reach out to us and we will try to find a solution that supports your well-being and helps you get the most possible out of this course. The sooner you open a line of communication with us, the better-positioned we will be to figure something out. We understand that these are unpredictable times and you should not hesitate to get in touch with us at any point.

Canvas display name change

Canvas uses the "Display Name" as set in myUFL. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, click on the dropdown at the top right, and select "Directory Profile." Click "Edit" on the right of the name panel, uncheck "Use my legal name" under "Display Name," update how you wish your name to be displayed, and click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

UF Policies

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student

Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>
- Student Success Initiative, <http://studentsuccess.ufl.edu>

Student Complaints

Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

Online Course: <http://www.distance.ufl.edu/student-complaint-process>

Course Evaluation

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at:

<https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.